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(FILE 'HOME' ENTERED AT 15:56:11 ON 26 JUL 2007)  
FILE 'CA' ENTERED AT 15:56:26 ON 26 JUL 2007  
L1 3243 S (FLUORESCEN? OR FLUORESCING OR LUMINESCEN? OR LUMINESCING) AND  
(NON(W) (FRET OR FLUORESCEN?) OR NONFRET OR NONFLUORESC?)  
L2 605 S L1 AND (QUENCH? OR DIMER OR CLOSE(1A) CONTACT? OR DYE(1W) DYE OR  
HYDROPHOBIC(2A) INTERACT?)  
L3 106 S L1 AND (QUENCH? OR DIMER OR DILABEL? OR (DUAL OR DI OR DOUBLE OR BI  
OR TWO OR PAIR)(1A) (FLUOROPHORE OR CHROMOPHORE OR DYE OR INDICATOR  
OR LABEL?) OR BILABEL? OR DONOR OR ACCEPTOR) AND (STATIC OR GROUND  
STATE OR STACK? OR CLOSE(1A) CONTACT? OR DYE(1W) DYE OR HYDROPHOBIC  
(2A) INTERACT?)  
L4 34 S L2 AND (PEPTIDE OR POLYPEPTIDE OR POLYAMINO? OR POLY AMINO?)  
L5 33 S L1 AND KINASE  
L6 324 S L1 AND (DIMER OR DILABEL? OR (DUAL OR DI OR DOUBLE OR BI OR TWO OR  
PAIR)(1A) (FLUOROPHORE OR CHROMOPHORE OR DYE OR INDICATOR OR  
LABEL?) OR BILABEL? OR DONOR OR ACCEPTOR)  
L7 82 S L6 AND (PEPTIDE OR POLYPEPTIDE OR PROTEIN OR ENZYM? OR POLYAMINO?  
OR POLY AMINO?)  
L8 71 S L1 AND QUENCH?(6A) (DIMER OR DILABEL? OR (DUAL OR DI OR DOUBLE OR  
BI OR TWO OR PAIR)(1A) (FLUOROPHORE OR CHROMOPHORE OR DYE OR  
INDICATOR OR LABEL?) OR BILABEL? OR DONOR OR ACCEPTOR OR STATIC OR  
GROUND STATE OR STACK? OR CLOSE(1A) CONTACT? OR DYE(1W) DYE OR  
HYDROPHOBIC(2A) INTERACT?)  
L9 15 S L1 AND (EXIMER OR EXCIMER OR EXIPLEX OR EXCIPLEX) (6A) QUENCH?  
L10 257 S L3-5, L7-9  
L11 140 S L10 AND PY<2000  
L12 20 S L10 AND PATENT/DT  
FILE 'BIOSIS' ENTERED AT 16:34:36 ON 26 JUL 2007  
L13 67 S L11  
FILE 'MEDLINE' ENTERED AT 16:35:22 ON 26 JUL 2007  
L14 62 S L11  
FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 16:36:29 ON 26 JUL 2007  
L15 175 DUP REM L11 L12 L13 L14 (114 DUPLICATES REMOVED)

=> d bib,ab 115 1-175

L15 ANSWER 33 OF 175 CA COPYRIGHT 2007 ACS on STN  
AN 128:252109 CA  
TI Limitations of **quenching** as a method of fluorometric analysis of **non-  
fluorescent** analytes  
AU Rakicioglu, Yener; Mickey Young, Melissa; Schulman, Stephen G.  
CS Gainesville, College of Pharmacy, University of Florida, FL, 32610, USA  
SO Analytica Chimica Acta (1998), 359(3), 269-274  
AB Diffusional **quenching** of ordinary fluorophores (with decay times no  
longer than several tens of nanoseconds), a process employed in many  
**fluorescence** optical sensors, is rather insensitive as a anal. method  
having limits of detection no better than  $10^{-4}$  M. Longer lived  
luminophores, such as lanthanides, actinides and phosphorophores,  
however, can be **quenched** with substantially lower detection limits for  
the **quencher**. **Static quenching**, however, is limited by the thermodyn.  
strength of the complex(es) formed between the fluorophore and **quencher**

rather than by the decay time of the fluorophore and the diffusibility of the **quencher** and can be quite sensitive as an anal. method for the **quencher**.

L15 ANSWER 155 OF 175 CA COPYRIGHT 2007 ACS on STN

AN 83:110396 CA

TI Long-range **quenched peptides** as fluorogenic substrates of proteolytic **enzymes**

AU Carmel, Amos

CS Dep. Biophys., Weizmann Inst. Sci., Rehovot, Israel

SO Pept., Proc. Eur. Pept. Symp., 13th (1975), Meeting Date 1974, 385-91.  
Editor(s): Wolman, Yecheskel. Publisher: Wiley, New York, N. Y.

AB New techniques were developed for monitoring the hydrolysis of **peptides** by proteinases by using the principle that the emissive features of a **fluorescent** chromophore are affected not only by the immediate environment but also by interactions with moieties which are located at some distance, either in soln. or on the same mol. backbone. Modifications in the geometry of such a system can therefore be followed by a change in the extent of these interactions as reflected in the **fluorescence** spectrum. In a compd. such as anthracene 9-carbonyl- $\beta$ -alanyllysylalanyl-2-naphthylmethylamide-HBr (I), the **donor** fluorophore is the naphthalene moiety while the **acceptor** fluorophore is the anthracene moiety. In such a compd. there is an overlap between the emission spectrum of the **donor** and the absorption spectrum of the **acceptor** which can be expressed quant. as an integral equation. The new method was applied to the study of the tryptic digestion of I and 3 homologous oligolysines blocked by the same chromophores, anthracene 9-carbonyl- $\beta$ -alanyl-(Lys)2-4-2-naphthylmethylamide. The p-nitrobenzyl ester-2HBr's of the **peptides**  $\epsilon$ -anthranilyllysylalanine,  $\epsilon$ -anthranilyllysylphenylalanine, and  $\epsilon$ -anthranilyllysylalanylalanine were similarly studied with leucine aminopeptidase. The p-nitrobenzyl ester-HBr and -2HBr, resp., of anthracene 9-carbonyl- $\beta$ -alanyllysylalanine and tryptophyllsyalanine were hydrolyzed by porcine elastase and p-nitrophenylalanylalanyllysyl-1-naphthylaminoethylamide-3HBr was a substrate for Clostridium histolyticum aminopeptidase. The new techniques possess these advantages. Suitable pairs of either **donor-acceptor** or fluorophore-p-nitrobenzyl (**nonfluorescent**) groups can be introduced into the substrate mol. at chosen intervals so as not to participate directly in the **enzymic** reaction. Hence, changes in **fluorescence** can reflect directly the rate of cleavage of the susceptible bonds. Another advantage is the great versatility in prepg. potential substrates.

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STN INTERNATIONAL LOGOFF AT 16:37:39 ON 26 JUL 2007